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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/725,543	12/03/2003	George W. McClurg	1823.0820004	3189
26111	7590	10/15/2004	EXAMINER	
STERNE, KESSLER, GOLDSTEIN & FOX PLLC 1100 NEW YORK AVENUE, N.W. WASHINGTON, DC 20005			TABATABAI, ABOLFAZL	
			ART UNIT	PAPER NUMBER
			2625	

DATE MAILED: 10/15/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/725,543

Applicant(s)

MCCLURG ET AL.

Examiner

Abolfazl Tabatabai

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 December 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-11 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 03 December 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date August 24, 2004.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1, 2, 4 and 10 are rejected under 35 U.S.C. 102(b) as being anticipated by Maase et al (U S 5,528,355).

Regarding claim 1, Maase discloses a scanning optical device used in a system configured to capture image data representing biometric data, comprising:

an optical device (fig. 1 element 12 and column 3, lines 47-52);

means for rotating (column 6, lines 38-42 and column 9, lines 46-55); and,

a detection device (fig. 3 element 48);

wherein the optical device directs light that has totally internally reflected from an inside surface of a non-planar prism in the system onto the detection device (column 5, lines 2-7 and column 6, lines 14-24), while the rotating means rotates at least one of the optical device and the detecting device during detection of the light (column 2, lines 46-55 and column 10, lines 32-46).

Regarding claim 2, Maase discloses the scanning optical device of claim 1, wherein the rotating means rotates at least one of the optical device and the detecting device around an axis of symmetry of the non-planar prism to scan an entire surface area of the inside surface of the non-planar prism (column 5, lines 2-5 and 56-64).

Regarding claim 4, Maase discloses the scanning optical device of claim 1, wherein the rotating means comprises: a rotating optical element coupled to a motor, such that the rotating optical element rotates about an axis of symmetry of the system (column 2, lines 46-55 and column 5, lines 56-60).

Regarding claim 10, Maase discloses the scanning optical device of claim 1, wherein the rotating means comprises one of a belt and pulley system, a electromagnetic system, a resilient device system, or a stepper motor (column 9, lines 59-63).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 3, 8 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over

Maase et al (U S 5,528,355) in view of Redmond (U S 5,677,763).

Regarding claim 3, Maase discloses the scanning optical device of claim 1, wherein the rotating means comprises:

a motor (fig. 8 element 58).

However, Maase is silent about the specific details regarding the step of:

a belt and pulley system coupled to the optical device and the detection device, wherein when the motor operates the belt and pulley system is configured to rotate the

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imaging optics and the detection device about an axis of symmetry of the non-planar prism to scan an entire surface area of the inside surface of the non-planar prism.

In the same field (optical system) of endeavor, however, Redmond discloses optical device for measuring physical and optical characteristics of an object comprising the step of:

a belt and pulley system coupled to the optical device and the detection device, wherein when the motor operates the belt and pulley system is configured to rotate the imaging optics and the detection device about an axis of symmetry of the non-planar prism to scan an entire surface area of the inside surface of the non-planar prism (column 3, lines 48-56).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to use a belt and a pulley as taught by the Redmond in the system of Maase because Redmond provides Maase a system for measuring and inspecting physical and optical characteristics of an object while having an advantages of a line array device to produce high resolution images without moving the object past the one-dimensional line sensor array.

Regarding claim 8, Maase is silent about the specific details regarding the step of the rotating optical element includes a dove prism.

In the same field (optical scanner) of endeavor, however, Redmond discloses optical device for measuring physical and optical characteristics of an object comprising the step of:

The rotating optical element includes a dove prism (column 3, lines 9-18).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to use a dove prism as taught by the Redmond in the system of Maase because Redmond provides Maase a system for measuring and inspecting physical and optical characteristics of an object while having an advantages of a line array device to produce high resolution images without moving the object past the one-dimensional line sensor array.

Regarding claim 9, Maase is silent about the specific details regarding the step of the rotating optical element includes a Pechan prism.

In the same field (optical system) of endeavor, however, Redmond discloses optical device for measuring physical and optical characteristics of an object comprising the step of:

The rotating optical element includes a Pechan prism (column 3, lines 9-18).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to use a Pechan prism as taught by the Redmond in the system of Maase because Redmond provides Maase a system for measuring and inspecting physical and optical characteristics of an object while having an advantages of a line array device to produce high resolution images without moving the object past the one-dimensional line sensor array.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and

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the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Maase et al (U S 5,528,355) in view of Schmidt et al (U S 4,611,881).

Regarding claim 11, Maase is silent about the specific details regarding the step of the scanning optical device of claim 1, wherein the rotating means moves along an arcuate path to capture radial scan line images transmitted through a base of the non-planar prism.

In the same field (optical system) of endeavor, however, Schmidt discloses optical apparatus for scanning radiation over a surface comprising the rotating means moves along an arcuate path to capture radial scan line images transmitted through a base of the non-planar prism (column 3, lines 10-22).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to use an arcuate path to capture radial scan line images as taught by the Schmidt in the system of Maase because Schmidt provides Maase a system with a plurality of optical reflectors and associated focusing lenses are continuously rotated about a central axis. The advantages of this scanning systems is that remote reflectors can be continuously rotated at a high scanning velocity.

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

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invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 5-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Maase et al (U S 5,528,355).

Regarding claims 5-7 while Maase discloses the rotating means but does not expressly teach a resolution value of about 500 dots to about 1000 dots per inch. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to have resolution value of about 500 dots to about 1000 dots per inch. Applicant has not disclosed that a resolution value of about 500 dots to about 1000 dots per inch provides an advantage, is used for a particular purpose or solves a stated problem. One of ordinary skill in the art, further more would have been expected Applicant's invention to perform equally well with either the value taught by Maase or the claims 5-7 resolution value of about 500 dots to about 1000 dots per inch because both values perform the same function to generate images having a resolution values.

Therefore, it would have been obvious to combine to one of ordinary skill in this art to modify Maase with to obtain the invention as specified in claims 5-7.

Other Prior Art

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Byren (U S 4,717,822) discloses roste scanning surveillance sensor.

King (U S 4,461,576) discloses optical measuring system.

Barlow et al (U S 4,420,261) disclose optical position location apparatus.

Hasslinger et al (U S 3,806,706) disclose optical label reader and decoder.


Contact Information

10. Any inquiry concerning this communication or earlier communications from the Examiner should be directed to ABOLFAZL TABATABAI whose telephone number is (703) 306-5917.

The Examiner can normally be reached on Monday through Friday from 9:30 a.m. to 7:30 p.m. If attempts to reach the examiner by telephone are unsuccessful, the Examiner's supervisor, Mehta Bhavesh M, can be reached at (703) 308-5246. The fax phone number for organization where this application or proceeding is assigned is (703) 872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Abolfazl Tabatabai
Patent Examiner
Group Art Unit 2625
October 17, 2004


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